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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/087,496	05/29/1998	JAN E. FORSLOW	2372-5	9614

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EXAMINER

NGUYEN, TOAN D

ART UNIT PAPER NUMBER

2665

DATE MAILED: 07/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/087,496

Applicant(s)

JAN E. FORSLOW

Examiner

Toan D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-57,60-66,68-75,77-79,115,116 and 118-121 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49-57,60-66,68-75 and 77-79 is/are allowed.
- 6) ☒ Claim(s) 115,116 and 118-121 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 25.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 115-116 and 118-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kujoory et al (US 6,021,263) in view of Kari et al. (US 6,603,738).

For claims 115-116 and 119-121, Kujoory et al disclose management of ATM virtual circuits with resources reservation protocol, comprising:

electronic circuitry (figure 2, reference 110) configured to merge packets from different sessions with a same quality of service (col. 3 lines 31-45).

However, Kujoory et al do not disclose assign packets destined for a same geographical service area but with different qualities of service to different priority queues corresponding to the different qualities of service, wherein the electronic circuitry is configured to remove a large number of packets from a queue having a higher quality of service than a lower quality of service and destined for a different mobile radio hosts within a same geographical service area. In an analogous art, Kari et al. disclose assign packets destined for a same geographical service area but with different qualities of service to different priority queues corresponding to the different qualities of service (col. 3 lines 25-27, col. 3 lines 44-49 and col. 3 lines 61-64), wherein the electronic circuitry (figure 1, reference SGSN 15) is configured to remove a large number of packets from a queue having a higher quality of service than a lower quality of service (col. 4

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lines 55-58), and destined for a different mobile radio hosts within a same geographical service area (col. 3 lines 61-64). Kari et al disclose further wherein the electronic circuitry (router means) is configured to perform the merging using first in first out scheduling except when packets cannot be delivered within a specified time (col. 3 lines 46-49 and col. 5 lines 23-24 as set forth in claim 116); wherein the electronic circuitry is configured to determine if a reservation request for a particular quality of service is permitted by a subscription corresponding to the mobile radio host (col. 5 lines 57-61 as set forth in claims 119-121).

One skilled in the art would have recognized assign packets destined for a same geographical service area but with different qualities of service to different priority queues corresponding to the different qualities of service to use the teachings of Kari et al. in the system of Kujoory et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the assign packets destined for a same geographical service area but with different qualities of service to different priority queues corresponding to the different qualities of service as taught by Kari et al. in Kujoory et al.'s system with the motivation being to assign an arriving packet to a queue based on the basis of a subscriber-specific and/or quality-of service-specific criterion (col. 3 lines 25-55).

For claims 118, Kujoory et al disclose management of ATM virtual circuits with resources reservation protocol, comprising:

electronic circuitry (figure 2, reference 110) configured to merge packets from different sessions with a same quality of service (col. 3 lines 31-45).

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Kujoory et al do not disclose destined for different mobile radio hosts within a same geographical service area. In an analogous art, Kari et al. disclose destined for different mobile radio hosts within a same geographical service area (col. 3 lines 61-64).

One skilled in the art would have recognized destined for different mobile radio hosts within a same geographical service area to use the teachings of Kari et al. in the system of Kujoory et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the destined for different mobile radio hosts within a same geographical service area as taught by Kari et al. in Kujoory et al.'s system with the motivation being to provide the subscribers can also be divided into different quality classes (col. 3 lines 61-62).

However, Kujoory et al in view of Kari et al. do not disclose monitor each of the application flows to determine whether a data transmission volume limited is exceeded, and if so, to discard packets corresponding to an application flow having a lowest quality of service reserved. In an analogous art, Hoffman et al disclose monitor each of the application flows to determine whether a data transmission volume limited is exceeded (col. 22 lines 8-11), and if so, to discard packets corresponding to an application flow having a lowest quality of service reserved (col. 22 lines 36-38 and col. 22 lines 50). One skilled in the art would have recognized monitor each of the application flows to use the teachings of Hoffman et al in the system of Kujoory et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the monitor each of the application flows as taught by Hoffman et al in Kujoory et al.'s system with the motivation being to detect misbehaving flows (col. 22 line 8).

Allowable Subject Matter

3. Claims 49-57, 60-66, 68-75 and 77-79 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Regarding to claim 49, the prior art fails to teach a combination of the steps of:

establishing a packet session over the radio interface for a mobile radio host using radio resources from the pool during which plural application flows are communicated with an external network entity, each application flow having a corresponding stream of packets;

wherein establishing the packet session includes:

activating a packet session for the mobile radio terminal so that the mobile radio terminal is in communication with the gateway node, and

the mobile radio terminal requesting an end-to-end configuration between the mobile radio terminal and the external network entity, and

wherein the end-to-end configuration request establishes a network packet layer bearer between the mobile radio terminal and the gateway node permitting relay of data packet between the external network entity and the mobile radio terminal even though a network packet layer address is not assigned to the mobile radio terminal, in the specific combination as recited in the claim.

Regarding to claim 66, the prior art fails to teach a combination of the steps of:

establishing a packet session over the radio interface for a mobile radio host using radio resources from the pool during which plural application flows are communicated with an external network entity, each application flow having a corresponding stream of packets;

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making a reservation request for a particular quality of service for an individual application flow associated with the packet session;

determining whether the reservation request can be met with radio resources from the pool;

if so, establishing a logical bearer between the mobile radio host and the gateway node to bear plural ones of the individual application flows having different corresponding quality of services, in the specific combination as recited in the claim.

Regarding to claim 77, the prior art fails to teach a combination of the steps of:

establishing a packet session over the radio interface for a mobile radio host using radio resources from the pool during which plural application flows are communicated with an external network entity, each application flow having a corresponding stream of packets; and in the specific combination as recited in the claim.

Response to Arguments

5. Applicant's argument filed on March 29, 2004 have been fully considered, but are moot in view of new ground(s) of rejection.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 703-308-6602. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

TN
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**DUCHO
PRIMARY EXAMINER**

Duchetto
6-28-04